

REMARKS

The Office Action allowed Claims 21-33 and indicated that the subject matter of Claims 8-20, 39-41 and 43 would be allowed if rewritten in independent form. Accordingly, applicant now presents the allowed subject matter of Claim 8 as independent Claim 44, the allowed subject matter of dependent Claim 10 as independent Claim 45, the allowed subject matter of dependent Claim 39 as independent Claim 46, the allowed subject matter of dependent Claim 40 as independent Claim 47, with dependent Claim 48 dependent on the allowed subject matter of Claim 47.

Claims 34-37 have been cancelled.

The Office Action contended that the *Kurogi et al.* reference could be broadly construed under 35 U.S.C. § 102 even though the *Kurogi et al.* reference was neither recognizing nor solving the problem addressed by applicant's present invention. The Office Action further contended that it would be obvious to provide electrodes of *Kurogi et al.* with outer protrusions having a greater surface area than that of an inner protrusion since purportedly a change in size would be within ordinary skill in the art.

The Office Action further contended that the comparison of Figure 3 of the *Kurogi et al.* reference with Figure 4 of the present application still has the same basic configuration with outer protrusions within the boundary of each cell.

Applicant has amended Claims 1 and 38 to address the issues raised in the Office Action since it is clear that the *Kurogi et al.* reference is not providing a structure equivalent to that of the present applicant's, nor creating a cell configuration representative of the necessary resolution of pixels required in a plasma display panel driven in the manner set forth in applicant's present specification.

The *Kurogi et al.* reference is basically sacrificing a brightness and specifically wishes to limit or prevent any expansion of discharge in a column direction, as noted in Column 2, Lines 34-36, to improve the resolution of their particular arrangement of a cell. The discharge produced one side of the main electrode can be prevented from expanding to the other side, as set forth in Column 2, Lines 46-57, of the *Kurogi et al.* disclosure. To compensate for the loss in brightness, the frequency of the drive voltage is raised to sustain the light emission.

The *Kurogi et al.* reference is representative of a drive technology known as an Alternate Lighting of Surfaces (ALiS). ALiS technology was introduced by Fujitsu Hitachi Plasma Display, Ltd. to provide a sufficient number of cells to provide fine resolution, an electrode-sharing principle was employed rather than relying on two dedicated bus electrodes per visible line, a single electrode is used for the visible line above and below. In this configuration, the plasma display panel cannot be driven by a progressive scan mode, but instead has to use an interlaced mode that is well known for the broadcast TV systems.

Attached hereto is a reprint from HDTV Etc. Summer 2003, *Plasma TVs Product Directory*, wherein it is noted on page 133, that the ALiS method uses a simple cell structure where the gap between each sustaining electrode is used as a display line to address the resolution issue. Reference can be made to Figure 5 of the *Kurogi et al.* disclosure and Column 7, wherein an even field and odd field for one scene of image data is created. In the odd field, the odd number of rows are used for display and in the even field, the even number of rows are used for display so that data is presented from one scene in an interlacing manner. An example of the drive sequence can be seen in Figure 6 and is discussed in Column 7, Line 52, through Column 8, Line 25.

Thus, the *Kurogi et al.* reference teaches the ALiS method of the writing and display discharges being performed with respect to display electrode pairs (cells) divided into odd and even number rows for each frame and seeks to increase the number of light-emitting cells over the prior art by providing protrusions on both edges of each display electrode in a width direction. The *Kurogi et al.* reference differs from the present invention as set forth in the amended Claims 1 and 38 by utilizing a structure wherein a discharge is generated even between two adjacent electrode pairs.

The protrusions in the *Kurogi et al.* reference are provided in a width direction of the display electrodes to allow illumination to be effectively generated between adjacent display electrodes in order to realize the drive characteristics required in the ALiS method. The *Kurogi et al.* reference does not provide any structure nor any disclosure relating to a knowledge or awareness of the problems involved in securing a discharge magnitude between display electrode pairs using a sequential scanning method.

Claims 1 and 38 define a gas discharge panel having a panel driving circuit based on a field timesharing display method and defines features of a write period between the scan electrode and the sustain electrode in such a manner that a brightness can be increased at a low energy consumption while improving the illuminance efficiency above conventional plasma display panels.

It is believed that the Examiner was aware of the differences in the *Kurogi et al.* disclosure and was taking a broad interpretation of the independent Claims 1 and 38. The present invention, without the introduction of any new matter, has now addressed these issues with the amendment of Claims 1 and 38, that is clearly not taught nor suggested by *Kurogi et al.*'s utilization of an ALiS method of driving a display panel.

Even if there is a hypothetical assumption that a person skilled in this art would attempt to apply display electrodes designed for on ALiS method of display, disclosed in the *Kurogi et al.* reference, to a display electrode structure for a sequential scanning method, such a person of ordinary skill in the art would reject the necessity of going to the trouble of disposing display electrodes having a structure designed for a discharge gap in a discharge area does not equate to a discharge gap. Thus, we believe that the proposed amendments to Claims 1 and 38 do not add any new subject matter, but rather directly address the technical rejection of those claims.

Finally, newly drafted Claim 49 is also directed to a gas discharge panel based on a field timesharing display method and provides other structural features that provide a gap between the scan electrode and the sustain electrode in each display electrode pair as narrower than a gap between adjacent display electrode pairs. These structural features are certainly neither taught nor suggested in the cell arrangements defined in the *Kurogi et al.* disclosure in Figure 3.

In view of the above comments and the amendment to the claims, it is believed that the case is now in condition for allowance, and an early notification of the same is requested.

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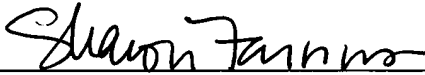
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If the Examiner believes a telephone interview will help further the prosecution of this case, he is respectfully requested to contact the undersigned attorney at the listed phone number.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 22, 2004.

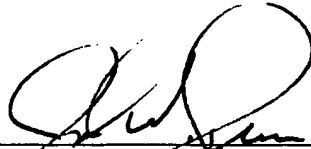
By: Sharon Farnus


Signature

Dated: September 22, 2004

Very truly yours,

SNELL & WILMER L.L.P.



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